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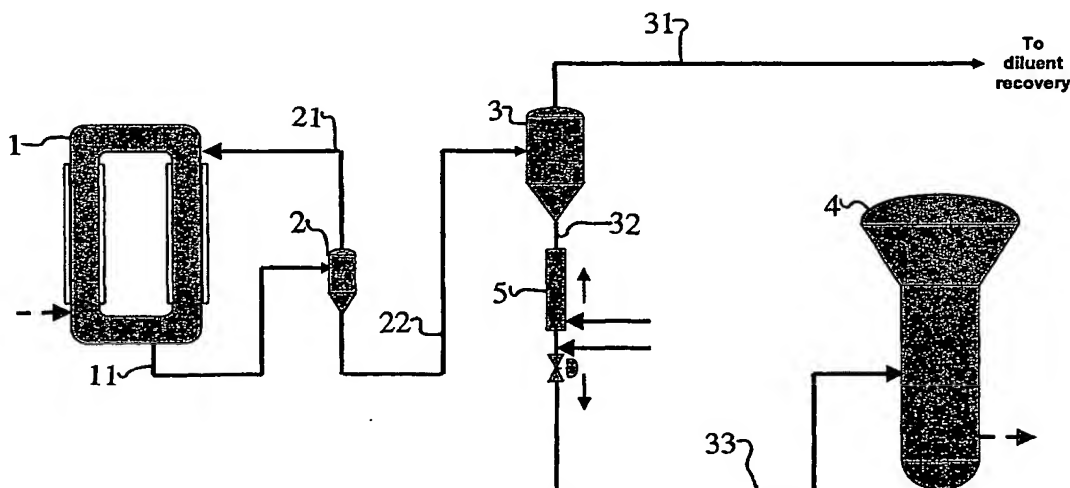
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(54) Title: PROCESS AND APPARATUS FOR PRODUCING OLEFIN POLYMERS



(57) Abstract: The present invention concerns a process and an apparatus for continuous polymerisation of olefin monomers in a cascade of polymerisation reactors. According to the process, an olefin monomer is polymerised first in slurry phase in an inert hydrocarbon diluent in at least one loop reactor and then, subsequently, in gas phase in at least one gas phase reactor. According to the invention, a polymer slurry is continuously withdrawn from the loop reactor and optionally concentrated. The concentrated slurry is conducted to a high pressure flash unit in order to remove the remaining fluid phase, and fed to the gas phase reactor. With the process described in this invention, it is possible to produce bimodal polyethylene with good properties. The operation of the process is stable because of the truly continuous operation.

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## INTERNATIONAL SEARCH REPORT

International application No.

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: C08F 2/14, C08F 2/34, C08F 10/00, C08F 297/08 // B01J 19/24  
 According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4187278 A (MICHAEL L. CLIFFORD), 5 February 1980 (05.02.1980), column 1, line 39 - line 62, abstract, claims, figure --	1-4,6-30
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☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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